A NEW SPECIES OF MEGASELIA (RONDANI) FROM HAYLEY WOOD, CAMBRIDGESHIRE (DIPTERA: PHORIDAE)

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Abstract

Megaselia symondsi **sp. nov.** (Dip.: Phoridae) is described from the canopy of an oak (*Quercus*) tree in Hayley Wood, Cambridgeshire.

Introduction

During July 2002 I helped run a course on Insect Systematics, under the auspices of the Cambridge University Museum of Zoology and the Cambridgeshire Wildlife Trust, using Hayley Wood nature reserve, Cambridgeshire, as our collecting site. This reserve has a rich scuttle fly fauna (Disney, 1987, 1988). During the course my colleague Martin Ellwood organised the fogging of the canopies of two oak trees, using a pyrethrin fog (Pybuthrin 33 – Aventis Environmental Science – 0.38% Pyrethrin w/w (3gl⁻) synergised with Piperonyl butoxide). Among the Phoridae obtained was a single male of a new species of the giant genus *Megaselia* Rondani. It is described below and named after Ray Symonds, a colleague and a Warden of Hayley Wood nature reserve.

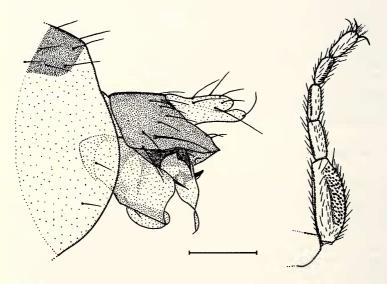
Megaselia symondsi sp. nov

Male

Frons brown, a little wider than long, with fine but dense microsetae and 58-60 hairs. Lower supra-antennal bristles shorter and slimmer than upper pair, which are about as far apart as pre-ocellars. Antials closer to anterolaterals than to upper SAs and almost directly below ALs, which are clearly higher on frons. POs further apart than either is from a mediolateral bristle, all four bristles being in an almost straight transverse row. Two bristles on cheek and a stronger pair on jowl. Postpedicel (third antennal segment) subglobose, brown but not dark, and with about ten unusually small SPS vesicles (being less than diameters of sockets of frontal hairs). Palps yellow with six bristles (the longest being between the upper and lower SAs in size) and as many hairs. Labrum pale straw yellow and with greatest width about 0.8× that of postpedicel. Labella almost as pale and with only a few spinules below. Thorax brown. Each side of scutum with a humeral, three notopleurals, an intra-alar, a postalar and a prescutellar dorsocentral bristle. Mesopleuron with 7-8 small hairs and a bristle at rear margin. Scutellum with an anterior pair of short hairs (shorter than those at rear of scutum) and a posterior pair of bristles. Abdominal tergites dark brown with sparse small hairs, which are a little longer at rear margins of T4-T6. Venter pale straw yellow tinged grey (due to microscopic dentcles) and with fine hairs below on segments 3-6. Hypopygium brown, with a paler left lobe of the hypandrium, a straw yellow anal tube and as Fig. 2. The left lobe of the hypandrium is bare, broad and undulating. The brown right lobe is vestigial. Legs mainly light

brown with paler, straw yellow, parts, especially the distal two thirds of front coxa, parts of tarsi and of mid femur and tibia. Front tarsus as Fig. 1. Hairs below basal half of hind femur clearly longer than those of anteroventral row of outer half. Spinules of apical comb of hind tibia all simple. Wings about 1.0 mm long. Costal index 0.49. Costal ratios 3.12: 2.24: 1. Costal cilia only 0.05 mm long. No hair at base of vein 3. A single bristle on axillary ridge. Vein Sc clearly not reaching R1. Veins brown but 7 paler. Membrane lightly tinged grey. Haltere brown.

Holotype male, ENGLAND, Cambridgeshire, Hayley Wood, Grid ref. 52/2952, canopy of oak tree (*Quercus robur*), 10 July 2002 (*R. H. L. Disney*) (*Cambridge University Museum of Zoology*).



Figs 1-2. *Megaselia symondsi* sp. nov. male. (1) posterior face of front tarsus; (2) left face of hypopygium. (Scale bar = 0.1 mm).

Affinities

In the keys to the males of the British species of *Megaselia* (Disney, 1989) this species will run to couplet 48 where its combination of a bare left posterior lobe to the hypandrium and vein Sc not reaching R1 prevents progress. If one ignores the latter and proceeds to couplet 49 one finds the details of the hypopygium rule out any of the species of this section. In the keys to Palaearctic species of Schmitz (1957) it runs to couplet 20 on page 432, where the details of the hypopygium rules out both the species of this couplet. *M. romphaea* (Schmitz, 1947), formerly assigned to *Plastophora* Brues, will also run to this section. However, its anal tube is more massive and bears much stronger hairs at the tip of the proctiger.

The combination of the swollen front metatarsus with rows of modified hairs; a mesopleuron with hairs and a bristle; two hairs and two bristles on the scutellum; a differentiated bristle-like hair on each side of the epandrium; a large, bare, undulating left lobe of the hypandrium; short costal cilia; costa about half wing length; and a brown haltere, will serve to distinguish this species from those from other Biogeographic Regions.

Acknowledgements

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References

- Disney, R. H. L., 1987. A preliminary survey of the scuttle flies of Hayley Wood, with descriptions of three new species. *Proc. Trans. Br. Ent. Nat. Hist. Soc.* 20: 27-34.
- -, 1988. Scuttle flies in Hayley Wood. Nature in Cambs. 30: 21-22.
- , 1989. Scuttle Flies Diptera Phoridae Genus *Megaselia*. *Handbk Ident*. *Br. Insects* **10(8)**: 1-155. Schmitz, H., 1947. Neue Phoriden aus Osterreich (Diptera). *Broteria* **43**: 114-121.
- , 1957. Phoridae. In: Lindner, E. (ed.), Die Fliegen der palaearktischen Region 4(33), (Lieferung 196): 417-64.

Beautiful Hook-tip *Laspeyria flexula* (Lep.: Noctuidae) and Dingy Footman, *Eilema griseola* (Lep.: Arctiidae) new to Cheshire

The recently formed Cheshire Moth Panel is responsible for validation of records of scarce moths recorded within VC58. The current composition of the panel comprises the authors of this note. The panel has received information concerning two interesting records caught in 2001 in the village of Mouldsworth (O. S. grid reference SJ 512706) by Ian Landucci. On 6 July 2001,a Beautiful Hook-tip was caught at this site and on 30 July 2001a Dingy Footman was trapped. Both of these are new records for Cheshire (VC58).—A. WANDER, S. McWILLIAM, S. HIND and K. McCABE, 16 Bramhall's Park, Anderton, Northwich, Cheshire CW9 6AH.

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